

Amendments to the Claims:

Claims 1, 5, 6, 10, 12, 14 and 16 are amended herein. Claims 7, 9 and 11 are cancelled.

Claim 1 is amended to define more specifically the operative parameters for the system described therein.

Claim 5 is amended to clarify its language.

Claim 6 is amended to define more specifically the operative parameters for the system described therein.

Claim 7 is cancelled, its operative language having been incorporated into amended claim 6.

Claim 9 is cancelled.

Claim 10 is amended to change its dependency.

Claim 11 is cancelled.

Claim 12 is amended to change its dependency and to clarify its language.

Claim 14 is amended to define more specifically the operative parameters for the system described therein.

Claim 16 is amended to clarify its language.

The following listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (currently amended) An intrusion detection system comprising:
 - (a) a pair of optical lenses arranged a predetermined distance apart and at a predetermined height above a ground reference plane and having overlapping fields of view within an area to be monitored to form a common field of view said pair of lenses being tilted in a downward direction towards said ground reference plane;
 - (b) at least one light-sensitive device responsive to light from each of the optical lenses;
 - (c) ~~a range detector responsive to signals from said light-sensitive device operable to determine a range to an object within the common field of view; a range discriminator for setting at least one range gate so as to sense objects within said common field of view within predetermined ranges and for ignoring objects that appear outside of said predetermined ranges; and~~
 - (d) ~~a range discriminator for setting at least one range gate so as to sense objects within said common field of view at predetermined ranges and for ignoring objects that appear outside of said predetermined ranges~~ a range detector responsive to signals from said light-sensitive device operable to determine a range to an object within said common field of view and within said predetermined ranges.
2. (original) The intrusion detection system of claim 1 further including a light-sensitive device for each lens.
3. (original) The intrusion detection system of claim 1 wherein the light-sensitive devices include light-sensitive elements arranged in lines of pixels operably selected by the range discriminator to define the ranges included within the range gate.

4. (original) The intrusion detection system of claim 3 wherein multiple sets of lines of pixels are operably selected by the range discriminator to provide multiple range gates for the selective detection of objects within said common field of view.

5. (currently amended) The intrusion detection system of claim 4 further including a velocity detector responsive to signals from [[a]] said light-sensitive device and operable to determine velocity of an object sensed by said range detector within the ranges spanned by said range gates.

6. (currently amended) An intrusion detection system for monitoring a secure area comprising:

- (a) a pair of electro-optical devices arranged a predetermined distance apart and at a predetermined height above a ground reference plane, said devices being tilted in a downward direction and having a common field of view in the secure area to be monitored, each electro-optical device comprising a lens and a light-sensitive element, each light-sensitive element having a pixel array of multiple lines of pixels; and
- (b) a data processing device responsive to the light-sensitive element of each electro-optical device, the data processing device having a range detector to detect the presence of objects in the area to be monitored and the range to each of said objects, said data processing device including a range gate selector for ~~discriminating among said objects sensed by the range detector~~ creating multiple zones of ranges within said secure area to be monitored by extracting image data from selected selecting predetermined ones of said multiple lines of pixels in each said respective pixel array, and extracting image data therefrom.

7. (cancelled)

8. (original) The intrusion detection system of claim 6 wherein said data processing device further includes a velocity detector for determining velocity of objects detected by said range detector.

9. (cancelled)

10. (currently amended) The intrusion detection system of claim ~~[[9]]~~ 6 further including a light-sensitive device for each lens.

11. (cancelled)

12. (currently amended) The intrusion detection system of claim ~~[[11]]~~ 6 wherein said multiple ~~sets of~~ lines of pixels are operably selected by the range discriminator to provide multiple range gates for the selective detection of objects within said common field of view.

13. (original) The intrusion detection system of claim 12 further including a velocity detector responsive to signals from a light-sensitive device and operable to determine velocity of an object sensed by said range detector within the ranges spanned by said range gates.

14. (currently amended) An intrusion detection system for monitoring a secured area comprising:

- (a) a pair of passive electro-optical sensors, each sensor including a lens and a light-sensitive device having rows of electronically scanned pixel elements, each row of pixel elements being responsive to light from objects appearing within said area at respective ranges, said pair of sensors being mounted a predetermined distance apart and aimed downward into said secured area at an angle obtuse to a horizontal reference line; and
- (b) a data processing module coupled to the light-sensitive devices and having a range gate selector for selecting predetermined lines of pixels for processing scanned image data from objects appearing at predetermined ranges to determine a range to each of said objects appearing within said secure area at ranges defined by said range gate selector.

15. (original) The intrusion detection system of claim 14 wherein said range gate selector is operable to create multiple zones of ranges within said secure area to be monitored.

16. (currently amended) The intrusion detection system of claim 14 wherein said data processing device further includes a velocity detector for determining the velocity of objects detected by said range detector